STATE OF SOUTH DAKOTA

DEPARTMENT OF WATER AND NATURAL RESOURCES

BOARD OF MINERALS AND ENVIRONMENT

IN THE MATTER OF THE APPLICATION)
OF McCUTCHIN PETROLEUM CORPORATION)
FOR AN ORDER AMENDING OIL AND GAS)
ORDER NO. 3-79a AND ALL SUBSEQUENT)
ORDERS.

OIL AND GAS ORDER NO. 7-85

ORDER OF THE BOARD

This matter having come on for hearing before the Board of Minerals and Environment on October 17, 1985, at Rapid City, South Dakota; and

The South Dakota Department of Water and Natural Resources being represented by Assistant Attorney General Robert B. Vrooman; and

McCutchin Petroleum, Inc. being represented by Mr. Jerry A. McCutchin appearing pro se; and

Sam Harrison Company, being represented by
Mr. Michael M. Hickey of Bangs, McCullen, Butler, Foye and
Simmons, Rapid City, South Dakota; and

The Harding County Surface and Minerals Interest
Owners Association being represented by Mr. Reed C. Richards
of Deadwood, South Dakota; and

Antelope Production Company being represented by Mr. W.H. Gilmore, Jr. pro se;

NOW, THEREFORE, THE BOARD, having fully considered the testimony and exhibits received at the October 17, 1985 hearing, and being fully advised in the premises, hereby makes the following:

FINDINGS OF FACT

1. That notice of this hearing was given by

publication in the Pierre Daily Capital Journ ., the Buffalo Nations Center News and the Lead Daily Call; in addition, that notice of this hearing was mailed, by First Class mail, postage prepaid, to Mr. Jerry A. McCutchin, Jr. of Dallas, Texas; Mr. Michael M. Hickey of Rapid City, South Dakota; Mr. W.H. Gilmore of Midland, Texas; and Mr. Reed C. Richards of Deadwood, South Dakota.

- 2. That this hearing concerned an application made by McCutchin Petroleum, Inc. for an order changing the spacing units for the Cady Creek Field from 320-acre spacing to 160-acre spacing.
- 3. That pursuant to previous orders, all areas within the Cady Creek Field have previously been ordered spaced at 320-acre spacing.
- 4. That the areas within the Cady Creek Field spaced at 320-acre spacing as of October 17, 1985, include:

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Township 15 North, Range 3 East, B.H.M.
Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,
11, 12, 13, 14, 15, 16, 17, 18,
19, 20, 21, 22, 23, 24, 25, 26,
27, 28, 29, 30: All
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Township 16 North, Range 3 East, B.H.M. Sections 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36: All
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- 5. That the producing formation within the Cady Creek Field is the Shannon Formation.
- 6. That the Shannon Formation is a bar sand consisting of poorly sorted fine grained bio-turbated sandstone made up of discontinuous lenses of sandstones and mudstones which result in variances in permeability within the Shannon Formation.
- 7. That the Cady Creek Field is a common reservoir which will be more efficiently drained by 160-acre spacing.

- 8. That 160-acre spacing will result in the recovery of additional gas from the Cady Creek Field which would not be recovered under the present 320-acre spacing of the Cady Creek Field.
- 9. That correlative rights of parties presently owning interests in wells drilled on the present 320-acre spacing units must be protected when spacing units are subdivided.

CONCLUSIONS OF LAW

- 1. That due and proper notice of this hearing was given.
- 2. That the Board has jurisdiction over the matter pursuant to SDCL 45-9.
- 3. That the Board may change the unit spacing of wells within a field where the Board finds additional wells will prevent waste and will protect correlative rights while providing for the greatest possible economic recovery of oil and gas.
- 4. That there is adequate justification for changing the spacing as requested.
- 5. That the application as herein stated should be granted so as to space the Cady Creek Field at 160-acre spacing.

WHEREFORE, it is hereby ORDERED:

1. That the spacing units on the following tracts of land in the Cady Creek Field are hereby changed from 320acre spacing units to 160-acre spacing units, to wit:

Township 15 North, Range 3 East, B.H.M. Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30: All

Township 16 North, Range 3 East, B...M.
Sections 19, 20, 21, 22, 23, 24, 25, 26,
27, 28, 29, 30, 31, 32, 33, 34,
35, 36: All

- 2. All portions of 3-79a and all subsequent Orders of the Board dealing with spacing in the Cady Creek Field which are not specifically amended by this Order shall be and remain in full force and effect until such time as specifically stated otherwise by the Board.
- 3. That this Order shall cover only those portions of Harding County, South Dakota specified in paragraph one (1) above, and shall continue in force indefinitely.

Dated and signed this 2/ 2 day of November, 1985.

Richard C. Sweetman, Chairman Board of Minerals & Environment